

Rorippa subumbellata Rollins (1941)**TAHOE YELLOWCRESS**

FAMILY: *Brassicaceae*, the mustard family.

STATUS:

Heritage Program SENSITIVE LIST, ranks: G2 S1S2

USFWS/ESA: CANDIDATE for listing. **STATE OF NEVADA:** FULLY PROTECTED. **BLM:** Special Status

Species in Nevada. **USFS:** Humboldt-Toiyabe NF and Lake Tahoe Basin Sensitive Species.

NNNPS: THREATENED.

POPULATION CENSUS (NEVADA): 4 extant occurrences mapped at 1.0 km (0.6 mi) separation, OR 5 extant and 11 extirpated occurrences mapped at 0.16 km (0.1 mi) separation; total estimated individuals 420+, total estimated area unknown. **TREND:** DECLINING.

IMPACTS AND MAJOR THREATS (NEVADA): Impacted and threatened by recreational beach use, beach maintenance, shore zone development, and artificially prolonged high-water levels in Lake Tahoe.

INVENTORY EFFORT (NEVADA): Well inventoried in Nevada. Most recent entered survey 2000, average year of last survey 1998. **Years since last entered survey** (percent of mapped records at various survey ages): **0-5 yrs:** 93.8%; **21-30 yrs:** 6.3%.

LAND MANAGEMENT (NEVADA) in decreasing predominance: private lands, U. S. Forest Service Lake Tahoe Basin Management Unit, Nevada state lands.

RANGE: Carson City, Douglas and Washoe counties, Nevada; also in CA. Restricted to the shore zone of Lake Tahoe. Maximum Nevada **range dimension 8.2 km (5.1 mi)** excluding most disjunct record. **Type specimen** collected in Eldorado County, California.

ELEVATIONS RECORDED (NEVADA): 6220-6230 feet (1896-1899 meters).

HABITAT (NEVADA): Coarse sand and sandy soils of active beaches, stream inlets, beach dunes, and backshore depressions, generally within a few feet of the local water table, endemic to the shore zone of Lake Tahoe. Aquatic or wetland-dependent in Nevada.

PHENOLOGY: flowering summer. Range of most frequent **survey months:** June-August.

LIFE-FORM AND HABIT: small rhizomatous perennial herb.

DESCRIPTION: Herbaceous perennial from deeply buried rhizomes, stems several from the base, generally prostrate, 5-20 cm long; overall color dark to purplish green (sometimes yellowish), with pinnately lobed leaves, small yellow flowers, and short, shiny, hairless fruits. **Distinguishing features:** Rhizomatous perennial, basal leaf rosette none, flowers 2.5-4 mm long, sepals hairless and persistent in fruit, fruit hairless and 3-6 mm long, > 1.5 mm wide, style hairless and 1-1.5 mm long, stigma not expanded.

PHOTOGRAPHS: Weixelman and Atwood (1990); Nevada Natural Heritage Program images web page (1998-present), slide collection (1986-present), and files.

ILLUSTRATIONS: Mozingo and Williams (1980), Weixelman and Atwood (1990).

OTHER GENERAL REFERENCES (listed separately): Hickman (1993), Rollins (1993).

SPECIFIC REFERENCES:

California State Lands Commission. 1998. Tahoe yellow cress draft biological assessment plan. Sacramento: California State Lands Commission, unpublished report.

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Josselyn, M. J., J. Ferreira, R. Coates, and T. Abbe. 1992. DRAFT management and conservation plan for *Rorippa subumbellata* Roll., Tahoe yellow cress. Sacramento: California State Lands Commission.

Knapp, C. 1980. *Rorippa subumbellata*: status in the Lake Tahoe Basin. South Lake Tahoe, California: U. S. Forest Service.

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Stuckey, R. L. 1972. Taxonomy and distribution of the genus *Rorippa* (Cruciferae) in North America. Sida 4: 279-426.

OF FURTHER INTEREST: Appears to be a distinct and undisputed species.
